

COLORADO RIVER RECOVERY PROGRAM
FY 2006 ANNUAL PROJECT REPORT
REVISED 12-6-06

RECOVERY PROGRAM
PROJECT NUMBER: CAP-9

I. Project Title: Yampa Management Plan/Elkhead Reservoir Enlargement

II. Principal Investigator(s):

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III. Project Summary:

Elkhead Reservoir Enlargement is a cooperative effort between the Colorado River Water Conservation District and the Recovery Program. The enlargement will include approximately 11,750 acre-feet of new storage. The Recovery Program is purchasing out-right 5,000 acre-feet of storage. The Recovery Program is responsible by cooperative agreement for 20/47ths of the project costs plus 100 percent of the permanent fish containment facilities. Funding for this purchase is being provided under a cooperative agreement using Bureau of Reclamation capital funding and Colorado Department of Natural Resources Native Species Conservation Fund to meet Colorado's obligation to the Recovery Program. Construction began in march 2005 after the Yampa River Management Plan and all agreements and permits were completed. Construction was completed in November 2006 ahead of schedule and under budget! Water delivery are expected in 2007 on a test basis to work out water administration on elk creek and Yampa Rive downstream fo the project.

IV. Study Schedule:

- 1) Coordination with the Recovery Program, State of Colorado, City of Craig - ongoing
- 2) Design of Reservoir Enlargement - completed November 2004
- 3) NEPA compliance - Completed February 2005
- 4) Award construction contracts - Completed March 2005
- 5) Begin construction of dam enlargement and mitigation area M1 - March 2005
- 6) Complete necessary funding and administrative agreements - June 2005
- 7) Complete construction of Mitigation Area M1 - May 2006

8) Complete construction of dam enlargement -December 2006

9) Complete wetlands plantings and mitigation areas - May 2007

10) Store and deliver water - ongoing beginning Spring 2007

V. Relationship to RIPRAP:

Yampa River Action Plan: Yampa I.B.2.a.(2)(a)iii)

VI. Accomplishment of FY 2006 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

Construction Contract No. 1 - Mitigation Area M1 and Tree Removal

The mitigation area in the upstream of the new reservoir consists of three sheet pile and earthen dikes across Elkhead Creek and the valley flood plain. This work was completed in March of 2006.

Challenges in FFY 2006

Higher than normal spring runoff, peak flow of 2260 cfs vs. average peak of 1300 cfs, overwhelmed mitigation area M1 sediment accumulation dikes causing damage which will require repair in November/December 2006.

Construction Contract No. 2 Enlargement of Elkhead Creek Dam and Elkhead Reservoir

Several major components of the reservoir enlargement project were advanced or completed in Federal Fiscal Year 2006, including:

- Completion and opening of the detour across the reservoir basin to allow work on the dam embankment
- Completion of mitigation areas M2 and M3 grading
- Completion of County Road 29 realignment
- Installation of the outlet conduits in the outlet tunnel and grouting of the tunnel
- Completion of the foundation grouting
- Demolition of the existing dam spillway
- Completion of the majority of the enlarged dam embankment
- Completion of the spillway concrete and riprap stilling basin
- Placement of the spillway bridge
- Excavation of a substantial portion of the spillway approach channel
- Completion of the control house concrete work and riprap stilling basin
- Installation of the outlet tower gates and fish screens
- Installation of the control house valves
- Completion of the land trade/purchase with the Colorado State Land Board to acquire the dam site and other related project lands

Detail of the work completed is reflected in the attached payment request from September 2006 which summarizes the progress on all the bid items and expenditures through that date.

Several photographs of the construction are attached showing progress of the work through Federal fiscal year 2006. Work has progressed significantly since these photos documenting FFY 2006 progress were taken.

Challenges in FFY 2006

Delays in completion of foundation grouting in the valley bottom in the fall of 2005 necessitated postponement of “panel excavation” of new embankment core trench in the area of the dam toe to the spring of 2006. Better than expected ground water conditions enabled this work to proceed early during runoff of 2006.

Delays in delivery of outlet tower gates caused schedule delays and forced gate installation in February 2006.

Higher than normal spring runoff, peak flow of 2260 cfs vs. average peak of 1300 cfs, overwhelmed county road detour causing damage and closure for 5 weeks. Higher than average runoff event did not affect dam embankment work.

VII. Recommendations: None.

VIII. Project Status:

Project construction completion expected in FFY 2007. Testing and monitoring of performance and success of some components will continue. Operations will continue indefinitely. A change in operations contemplated in Yampa Management Plan is expected to reduce spills from reservoir to the extent reasonable and possible. Recovery Program funds for annual operations and leased water will be required per cooperative agreement.

IX FFY 2006 Budget Status 10/1/05 - 9/30/06

Construction of the project and all related expenses are covered by cooperative agreement. The costs are prorated 20/47ths to the Recovery Program and 27/47ths to the Colorado River Water Conservation District based on the amount of storage water being acquired by each. The cost for and related to screening the outlet works to reduce the escape of non-native fish is 100 percent the responsibility of the Recovery Program and is not included in the Recovery Program expenditure ceiling contemplated by the cooperative agreement.

A. Funds Provided FFY 2006:

Summary:

Funds Requested Under CA with the Recovery Program:	\$4,618,633.18
Funds requested for permanent fish screen expenses:	<u>\$ 768,855.08</u>
Total Recovery Program Funds Requested in FFY2006:	\$5,387,488.26

Funds received under the cooperative agreement:	\$2,193,741.73
Funds received for the permanent fish screen expenses:	<u>\$ 250,000.00</u>
Total Recovery Program Funds Received in FFY2006:	\$2,443,741.73

Total Recovery Program Outstanding Balance in FFY2006: ***\$2,943,746.53***

Permanent fish screen expenses:	\$ 518,855.08
Cooperative agreement:	\$2,424,891.45

Sources of funds provided:

Cooperative Agreement Expenses:

DNR Payments Requested for Project Expenses Under the Cooperative Agreement:

vendor payments:	\$2,875,622.10
mgmt fees:	<u>\$287,562.21</u>
TOTAL	\$3,163,184.31

DNR payments received:

vendor payments:	\$1,630,674.30
mgmt fees:	<u>\$163,067.43</u>
TOTAL	\$1,793,741.73

DNR Outstanding Balance: \$1,369,442.58

USBOR Payments Requested for Project Expenses Under the Cooperative Agreement:

vendor payments:	\$1,323,135.34
mgmt fees:	<u>\$132,313.53</u>
TOTAL	\$1,455,448.87

USBOR payments received:

vendor payments:	\$363,636.36
mgmt fees:	<u>\$36,363.64</u>
TOTAL	\$400,000.00

NOTE: USBOR payment was incorrectly credited to FY2005 in that annual report. Payment actually received in FY2006.

FFY 2006 BOR Outstanding Balance: \$1,055,448.87

CWCB Mitigation Grant

A grant from the CWCB to assist with project mitigation expenses was obtained by the River District. This grant was applied to the River District and the Recovery Program expenses under the CA on the project allocation proportions. The grant is for \$1,048,554 to be disbursed over 2006 and 2007. The amount disbursed by the CWCB in FFY 2006 was \$733,987. Of this \$421,308.54 was applied to River District obligations and \$312,678.46 was applied to Recovery Program obligations. The remainder will be disbursed in FFY 2007 and applied accordingly.

Permanent Fish Screen Expenses:

Expenses for the permanent fish screens are being paid by the Recovery Program from funds held by National Fish and Wildlife Foundation (NFWF).

NFWF payments requested:

vendor payments:	\$698,959.98
mgmt fees:	<u>\$69,895.10</u>
TOTAL	\$768,855.08

NFWF payments received:

vendor payments:	\$227,272.73
mgmt fees:	<u>\$22,727.27</u>
TOTAL	\$250,000.00

NFWF Outstanding Balance: \$518,855.08

B. Funds Expended:

See A above for fund expenditures in FFY 2006 shown as “vendor payments” and “management fees.” Below is summary of total project funds expended.

Total Project Expenses by end of FFY2006:

Project Expenses Under the CA:	\$21,813,949.18
10% management fee	<u>\$ 2,181,394.92</u>
Subtotal under the CA	\$23,995,344.10
 Permanent Fish Screen	 <u>\$ 768,846.07</u>
Total	\$24,764,190.17

River District Portion:

Project Expenses Under the CA (27/47):	\$12,531,417.61
10% management fee:	\$1,253,141.76
Less RD Portion of CWCB Mitigation Grant	<u><\$421,308.54></u>
Total	\$13,363,250.83

Recovery Program Portion:

Project Expenses Under the CA (20/47):	\$9,282,531.57
10% management fee:	\$ 928,253.16
Less Recovery Portion of CWCB Mitigation Grant:	<u><\$ 312,678.46></u>
Subtotal Expenses To Date Under the CA	\$ 9,898,106.27
Fish Screen (100%):	<u>\$ 768,846.07</u>
Total Project Recovery Program Obligation by end of FFY 2006:	\$10,666,952.34

Note: Overall 2006 portion of CWCB Mitigation Grant \$733,987

C. Difference: *[Include an explanation for any major difference.]*

Difference between expended funds provided by the Recovery Program in FFY 2006 and the Recovery Program's Obligation in FFY 2006 results from the lag time between the work being done, invoicing to the River District, payment by the River District to the contractors, request for funds from the Colorado DNR, USBOR and NFWF and payment by the Colorado DNR, USBOR and NFWF. At the end of FFY 2006 the River District was carrying \$2,943,746.53 of Recovery Program obligation for expended funds in FFY 2006.

D. Percent of the FY 2006 work completed, and projected costs to complete:

The project was approximately 98% complete at the end of FFY 2006. The project is behind schedule on some construction items. Dam embankment work is proceeding well and ahead of the accelerated schedule.

Estimated costs related to the remainder of the construction to be completed in FFY 2007:
(No contingency applied)

Total Project Expenses Under the CA:

Dam Construction	\$4,661,764	Revised 12-6-06
Wetlands Plantings	\$ 190,000	
Mitigation Area 1 Repair	\$ 180,000	
Engineering	<u>\$ 622,000</u>	
Sub-total	\$5,653,764	
10% Management Fee	<u>\$ 565,376</u>	
	\$6,219,140	Revised 12-6-06

Estimated Recovery Program costs related to the remainder of the construction to be completed in FFY 2007:

Under the CA:	20/47 x \$ 6,219,140 =	\$2,646,442
Less 2007 Recovery Program Portion of CWCB Mitigation Grant		<u><\$ 133,858></u>
	Revised 12-6-06	\$2,512,584
Permanent Fish Screens:	\$32,014 + 10% management fee = \$35,215	

Estimated Total Recovery Program Obligation for FFY 2007: \$2,547,799
Revised 12-6-06

Estimated Total Recovery Program Obligation through completion of the enlargement project:

Estimated total cost under the CA \$27,435,700 **Revised 12-6-06**

RIP Obligation under the Cooperative Agreement (20/47)	\$12,396,053	Revised 12-6-06
Permanent Fish Screens:	<u>\$ 804,061</u>	
Estimated Total Recovery Program Obligation	\$13,200,114	Revised 12-6-06

E. Recovery Program funds spent for publication charges: None in FFY 2006

X. Status of Data Submission (Where applicable): N/A

XI. Signed: Ray Tenney November 18, 2006
Principal Investigator Date

APPENDIX:

Construction Photographs taken near the end of the Federal Fiscal Year

Separate Attachment -August 2006 Payment Application (paid in September 2006) from Ames Construction for the Dam Enlargement Construction showing progress on all aspects of the work.

Construction Photographs



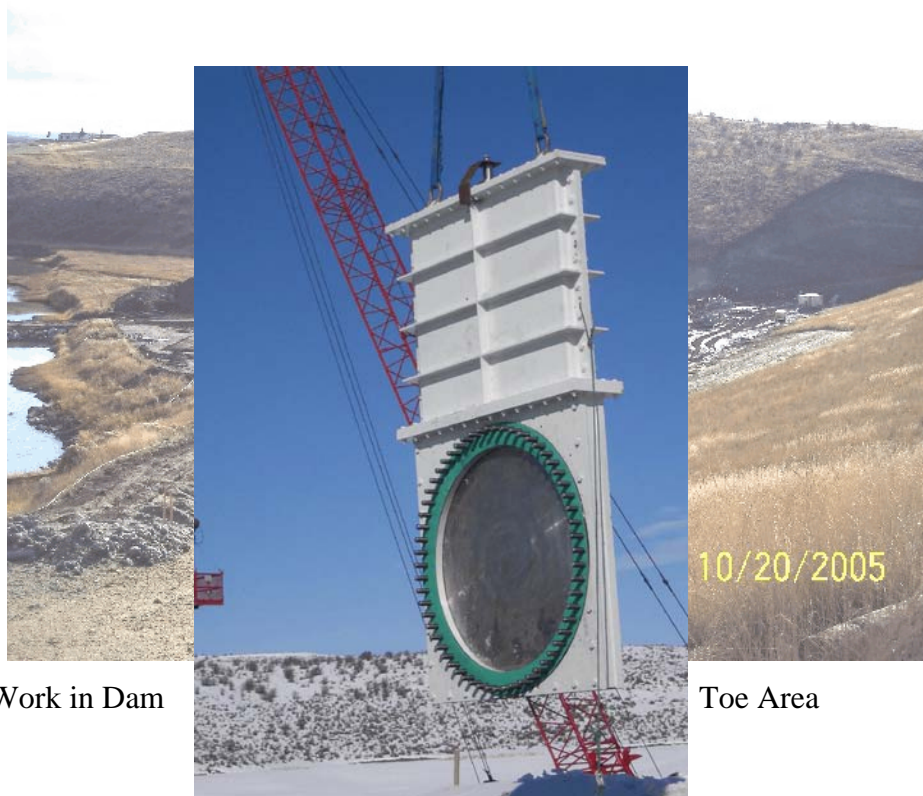
Original Dam Spillway



Inlet Tower Concrete Work 2nd Lift
October 2005



Outlet Control House October 2005



Grouting Work in Dam

Toe Area

60" gate for Outlet Tower Bottom Inlet



Fish
on lower
24" Tower



Screens
60" and
Inlets

Outlet Control House Under Maximum Screened Discharge
with reduced reservoir head and without energy dissipation valves, about 500 cfs



Dam
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Embank
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Embankme
Completion
ment
out”
r 20, 2006

Completed Outlet Tower with Completed Dam Embankment in Background
September 2006



Labyrinth
and Road

Spillway
Bridge

Spillway and Plunge Pool



Spillway Approach Channel Excavation

Dam Project Construction Payment Request
August 2006
Paid in September 2006

See attached file